

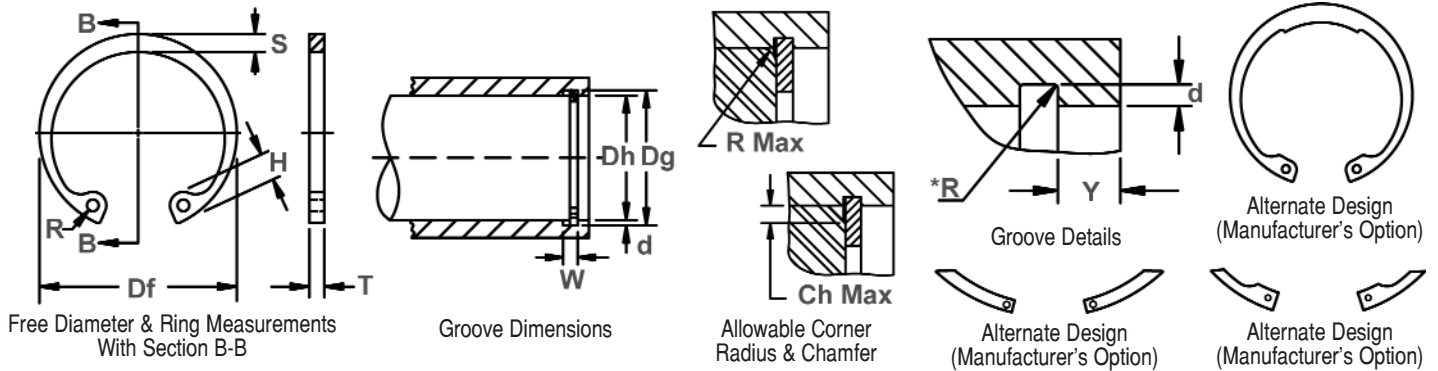


DHO Housing Rings

(DIN 472)

Axially Assembled, Internal, Metric

Once installed in the groove of a housing/bore, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



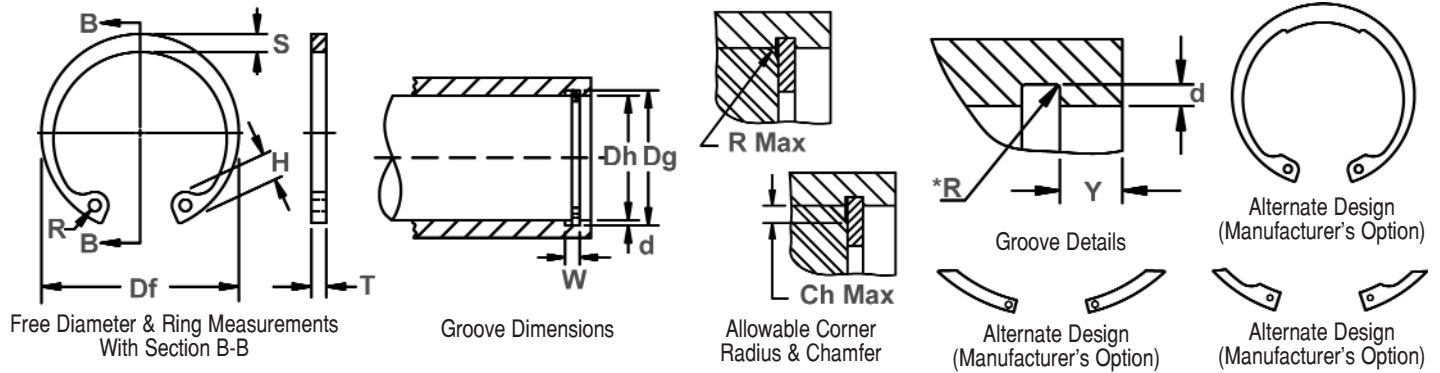
RING NO.	HOUSING Dia. (mm)	GROOVE SIZE					RINGS SIZE & WEIGHT							SUPPLEMENTARY DATA				
		DIAMETER		WIDTH	DEPTH	THICKNESS ***	FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.	
		Dh	Dg Tol.	W Min.	d	T Tol.	Df Tol.	H Max.	S Ref.	R Min.	Kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN		
DHO-8	8	8,4	+0,09	0,90	0,20	0,80	-0,05	8,7		2,4	1,1	1,0	0,10	0,6	2,0	0,86	0,5	1,5
DHO-9	9	9,4		0,90	0,20	0,80		9,8		2,5	1,3	1,0	0,13	0,6	2,0	0,96	0,5	1,5
DHO-10	10	10,4		1,10	0,20	1,00		10,8		3,2	1,4	1,2	0,26	0,6	4,0	1,08	0,5	2,2
DHO-11	11	11,4		1,10	0,20	1,00		11,8	+0,36	3,3	1,5	1,2	0,31	0,6	4,0	1,17	0,5	2,3
DHO-12	12	12,5		1,10	0,25	1,00		13,0	-0,10	3,4	1,7	1,5	0,37	0,8	4,0	1,60	0,5	2,3
DHO-13	13	13,6	+0,11	1,10	0,30	1,00		14,1		3,6	1,8	1,5	0,42	0,9	4,2	2,10	0,5	2,3
DHO-14	14	14,6		1,10	0,30	1,00		15,1		3,7	1,8	1,7	0,52	0,9	4,5	2,25	0,5	2,3
DHO-15	15	15,7		1,10	0,35	1,00		16,2		3,7	2,0	1,7	0,56	1,1	5,0	2,80	0,5	2,3
DHO-16	16	16,8		1,10	0,40	1,00		17,3		3,8	2,0	1,7	0,60	1,2	5,5	3,40	1,0	2,6
DHO-17	17	17,8		1,10	0,40	1,00		18,3		3,9	2,1	1,7	0,65	1,2	6,0	3,60	1,0	2,5
DHO-18	18	19,0		1,10	0,50	1,00		19,5		4,1	2,2	2,0	0,74	1,5	6,5	4,80	1,0	2,6
DHO-19	19	20,0		1,10	0,50	1,00		20,5		4,1	2,2	2,0	0,83	1,5	6,8	5,10	1,0	2,6
DHO-20	20	21,0	+0,13	1,10	0,50	1,00		21,5	+0,42	4,1	2,3	2,0	0,90	1,5	7,2	5,40	1,0	2,6
DHO-21	21	22,0		1,10	0,50	1,00		22,5	-0,13	4,2	2,4	2,0	1,00	1,5	7,6	5,70	1,0	2,6
DHO-22	22	23,0		1,10	0,50	1,00		23,5		4,2	2,5	2,0	1,10	1,5	8,0	5,90	1,0	2,7
DHO-23	23	24,1		1,30	0,55	1,20		24,6		4,2	2,5	2,0	1,34	1,7	8,0	6,80	1,0	4,6
DHO-24	24	25,2		1,30	0,60	1,20	-0,06	25,9		4,4	2,6	2,0	1,42	1,8	13,9	7,70	1,0	4,6
DHO-25	25	26,2		1,30	0,60	1,20		26,9	+0,42	4,5	2,7	2,0	1,50	1,8	14,6	8,00	1,0	4,7
DHO-26	26	27,2	+0,21	1,30	0,60	1,20		27,9	-0,21	4,7	2,8	2,0	1,60	1,8	13,8	8,40	1,0	4,6
DHO-27	27	28,4		1,30	0,70	1,20		29,1		4,7	2,9	2,0	1,75	2,1	13,3	10,10	1,0	4,5
DHO-28	28	29,4		1,30	0,70	1,20		30,1		4,8	2,9	2,0	1,80	2,1	13,3	10,50	1,0	4,5
DHO-29	29	30,4		1,30	0,70	1,20		31,1		4,8	3,0	2,0	1,88	2,1	13,6	10,90	1,0	4,6
DHO-30	30	31,4		1,30	0,70	1,20		32,1		4,8	3,0	2,0	2,06	2,1	13,7	11,30	1,0	4,6
DHO-31	31	32,7		1,30	0,85	1,20		33,4		5,2	3,1	2,5	2,10	2,6	13,8	14,10	1,0	4,7
DHO-32	32	33,7		1,30	0,85	1,20		34,4	+0,50	5,4	3,2	2,5	2,21	2,6	13,8	14,60	1,0	4,7
DHO-33	33	34,7	+0,25	1,30	0,85	1,20		35,5	-0,25	5,4	3,3	2,5	2,40	2,6	14,3	15,00	1,0	4,9
DHO-34	34	35,7		1,60	0,85	1,50		36,5		5,4	3,3	2,5	3,20	2,6	26,2	15,40	1,5	6,3
DHO-35	35	37,0		1,60	1,00	1,50		37,8		5,4	3,4	2,5	3,54	3,0	26,9	18,80	1,5	6,4
DHO-36	36	38,0		1,60	1,00	1,50		38,8		5,4	3,5	2,5	3,70	3,0	26,4	19,40	1,5	6,4
DHO-37	37	39,0		1,60	1,00	1,50		39,8		5,5	3,6	2,5	3,74	3,0	27,1	19,80	1,5	6,5
DHO-38	38	40,0		1,60	1,00	1,50		40,8		5,5	3,7	2,5	3,90	3,0	28,2	22,50	1,5	6,7

ALL DIMENSIONS IN MILLIMETERS.

*The radius "R" on the load side must not exceed 0.1 T.

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS. MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.



RING NO.	HOUSING Dia. (mm)	GROOVE SIZE					RINGS SIZE & WEIGHT							SUPPLEMENTARY DATA				
		DIAMETER		WIDTH	DEPTH	THICKNESS ***	FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./ Cham.	Max. load w/ R/Ch Max.	
		Dh	Dg Tol.	W Min.	d	T Tol.	Df Tol.	Tol.	H Max.	S Ref.	R Min.	kg/ 1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN	
DHO-39	39	41.0	+0.25	1.60	1.00	1.50	-0.06	42.0	+0.90	5.6	3.8	2.5	4.00	3.0	28.8	26.00	1.5	6.9
DHO-40	40	42.5		1.85	1.25	1.75		43.5		5.8	3.9	2.5	4.70	3.8	44.6	27.00	2.0	8.3
DHO-41	41	43.5		1.85	1.25	1.75		44.5		5.9	4.0	2.5	5.10	3.8	45.0	27.60	2.0	8.3
DHO-42	42	44.5		1.85	1.25	1.75		45.5		5.9	4.1	2.5	5.40	3.8	44.7	28.40	2.0	8.4
DHO-43	43	45.5		1.85	1.25	1.75		46.5		5.9	4.2	2.5	5.60	3.8	44.5	28.80	2.0	8.4
DHO-44	44	46.5		1.85	1.25	1.75		47.5		6.0	4.2	2.5	5.80	3.8	43.3	29.50	2.0	8.3
DHO-45	45	47.5		1.85	1.25	1.75		48.5		6.2	4.3	2.5	6.00	3.8	43.1	30.20	2.0	8.2
DHO-46	46	48.5		1.85	1.25	1.75		49.5		6.3	4.4	2.5	6.05	3.8	42.9	30.80	2.0	8.2
DHO-47	47	49.5		1.85	1.25	1.75		50.5		6.4	4.4	2.5	6.10	3.8	43.5	31.40	2.0	8.3
DHO-48	48	50.5		1.85	1.25	1.75		51.5		6.4	4.5	2.5	6.70	3.8	43.2	32.00	2.0	8.4
DHO-50	50	53.0	+0.30	2.15	1.50	2.00	-0.46	54.2	+1.10	6.5	4.6	2.5	7.30	4.5	60.8	40.50	2.0	12.1
DHO-51	51	54.0		2.15	1.50	2.00		55.2		6.5	4.7	2.5	7.75	4.5	60.2	41.20	2.0	12.0
DHO-52	52	55.0		2.15	1.50	2.00		56.2		6.7	4.7	2.5	8.20	4.5	60.2	42.00	2.0	12.0
DHO-53	53	56.0		2.15	1.50	2.00		57.2		6.7	4.9	2.5	8.22	4.5	60.7	42.90	2.0	12.1
DHO-54	54	57.0		2.15	1.50	2.00		58.2		6.7	5.0	2.5	8.25	4.5	60.4	43.60	2.0	12.3
DHO-55	55	58.0		2.15	1.50	2.00		59.2		6.8	5.0	2.5	8.30	4.5	60.3	44.40	2.0	12.5
DHO-56	56	59.0		2.15	1.50	2.00		60.2		6.8	5.1	2.5	8.80	4.5	60.3	45.20	2.0	12.6
DHO-57	57	60.0		2.15	1.50	2.00		61.2		6.8	5.1	2.5	9.40	4.5	60.8	46.00	2.0	12.7
DHO-58	58	61.0		2.15	1.50	2.00		62.2		6.9	5.2	2.5	10.50	4.5	60.8	46.70	2.0	12.7
DHO-60	60	63.0		+0.30	2.15	1.50		2.00		-0.07	64.2	+1.10	7.3	5.4	2.5	11.10	4.5	61.0
DHO-62	62	65.0	2.15		1.50	2.00	66.2	7.3	5.5		2.5		11.20	4.5	60.9	49.80	2.0	13.0
DHO-63	63	66.0	2.15		1.50	2.00	67.2	7.3	5.6		2.5		12.40	4.5	60.8	50.60	2.0	13.0
DHO-64	64	67.0	2.15		1.50	2.00	68.2	7.4	5.7		2.5		12.45	4.5	60.6	51.40	2.0	13.0
DHO-65	65	68.0	2.65		1.50	2.50	69.2	7.6	5.8		3.0		14.30	4.5	121	51.80	2.5	20.8
DHO-67	67	70.0	2.65		1.50	2.50	71.5	7.7	6.0		3.0		15.30	4.5	121	53.80	2.5	21.1
DHO-68	68	71.0	2.65		1.50	2.50	72.5	7.8	6.1		3.0		16.00	4.5	119	56.20	2.5	21.0
DHO-70	70	73.0	2.65		1.50	2.50	74.5	7.8	6.2		3.0		16.50	4.5	119	56.20	2.5	21.0
DHO-72	72	75.0	2.65		1.50	2.50	76.5	7.8	6.4		3.0		18.10	4.5	119	58.00	2.5	21.0
DHO-75	75	78.0	2.65		1.50	2.50	79.5	7.8	6.6		3.0		18.80	4.5	118	60.00	2.5	21.0
DHO-76	76	79.0	2.65	1.50	2.50	80.5	7.8	6.6	3.0	19.00	4.5	119	61.00	2.5	21.0			
DHO-78	77	80.0	+0.35	2.65	1.50	2.50	-0.54	82.5	+1.30	8.5	6.8	3.0	20.40	4.5	121	61.60	2.5	21.5
DHO-78	78	81.0		2.65	1.50	2.50		82.5		8.5	6.8	3.0	20.40	4.5	122	62.30	2.5	21.8
DHO-80	80	83.5		2.65	1.75	2.50		85.5		8.5	7.0	3.0	22.00	5.3	120	74.60	2.5	21.8

ALL DIMENSIONS IN MILLIMETERS.

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*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS. MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.

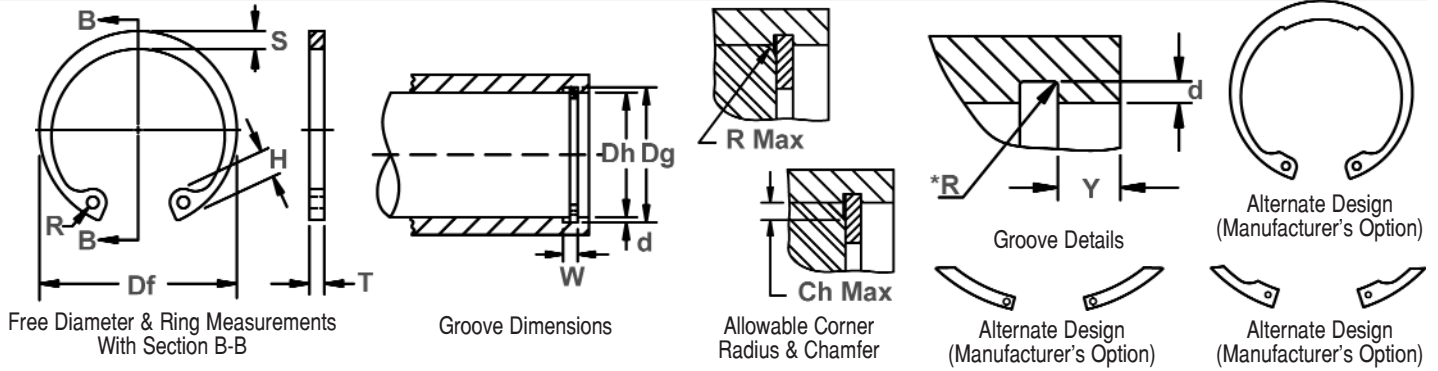


DHO Housing Rings

(DIN 472)

Axially Assembled, Internal, Metric

Once installed in the groove of a housing/bore, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



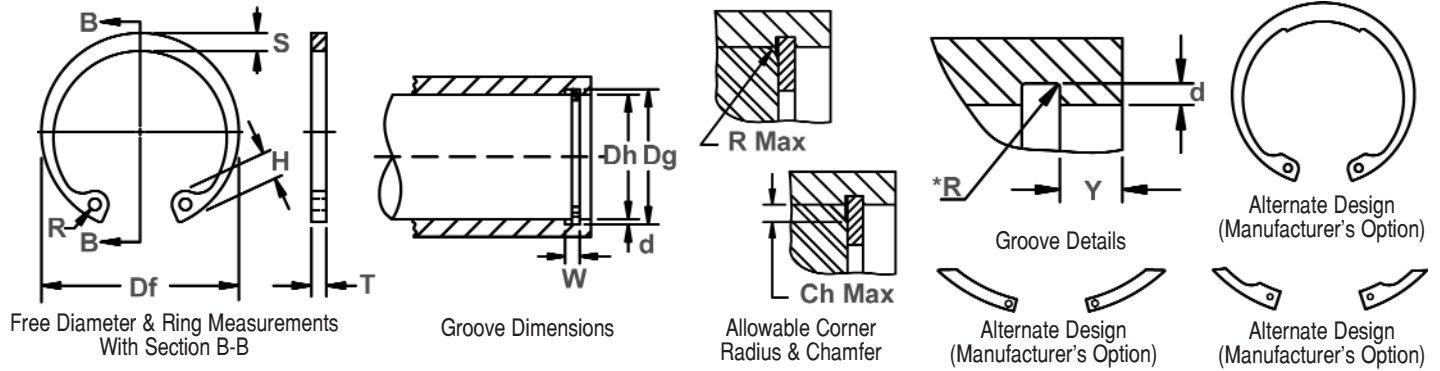
RING NO.	HOUSING Dia. (mm)	GROOVE SIZE			RINGS SIZE & WEIGHT						SUPPLEMENTARY DATA							
		DIAMETER		WIDTH	DEPTH	THICKNESS ***		FREE DIAMETER	LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.	
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.
DHO-81	81	84,5		2,65	1,75	2,50		86,5		8,5	7,0	3,0	23,00	5,3	119	75,80	2,5	21,6
DHO-82	82	85,5		2,65	1,75	2,50	-0,07	87,5		8,5	7,0	3,0	24,00	5,3	119	76,6	2,5	21,4
DHO-83	83	86,5		2,65	1,75	2,50		88,5		8,5	7,0	3,0	25,00	5,3	118	77,5	2,5	21,2
DHO-85	85	88,5		3,15	1,75	3,00		90,5		8,6	7,2	3,5	25,30	5,3	201	79,5	3,0	31,2
DHO-88	87	90,5	+0,35	3,15	1,75	3,00		93,5		8,6	7,4	3,5	31,00	5,3	204	81,3	3,0	31,8
DHO-88	88	91,5		3,15	1,75	3,00		93,5	+1,30	8,6	7,4	3,5	31,00	5,3	209	82,0	3,0	32,7
DHO-90	90	93,5		3,15	1,75	3,00	-0,08	95,5	-0,54	8,6	7,6	3,5	33,00	5,3	199	84,0	3,0	31,4
DHO-92	92	95,5		3,15	1,75	3,00		97,5		8,7	7,8	3,5	35,00	5,3	201	85,0	3,0	32,0
DHO-95	95	98,5		3,15	1,75	3,00		100,5		8,8	8,1	3,5	37,00	5,3	195	88,0	3,0	31,4
DHO-98	97	100,5		3,15	1,75	3,00		103,5		9,0	8,3	3,5	41,00	5,3	193	90,0	3,0	31,2
DHO-98	98	101,5		3,15	1,75	3,00		103,5		9,0	8,3	3,5	41,00	5,3	191	91,0	3,0	31,0
DHO-100	100	103,5		3,15	1,75	3,00		105,5		9,2	8,4	3,5	42,00	5,3	188	93,0	3,0	30,8
DHO-102	102	106,0		4,15	2,00	4,00		108,0		9,5	8,5	3,5	55,00	6,0	439	108,0	3,0	72,6
DHO-105	105	109,0		4,15	2,00	4,00		112,0		9,5	8,7	3,5	56,00	6,0	436	112,0	3,0	73,0
DHO-108	107	111,0		4,15	2,00	4,00		115,0		9,5	8,9	3,5	60,00	6,0	425	114,0	3,0	71,6
DHO-108	108	112,0	+0,54	4,15	2,00	4,00		115,0		9,5	8,9	3,5	60,00	6,0	419	115,0	3,0	71,0
DHO-110	110	114,0		4,15	2,00	4,00		117,0		10,4	9,0	3,5	64,50	6,0	415	117,0	3,0	71,0
DHO-112	112	116,0		4,15	2,00	4,00		119,0		10,5	9,1	3,5	72,00	6,0	418	119,0	3,0	72,0
DHO-115	115	119,0		4,15	2,00	4,00		122,0		10,5	9,3	3,5	74,50	6,0	409	122,0	3,0	71,2
DHO-118	117	121,0		4,15	2,00	4,00		125,0		10,7	9,6	3,5	75,50	6,0	399	124,0	3,0	70,0
DHO-118	118	122,0		4,15	2,00	4,00		125,0		10,7	9,6	3,5	75,50	6,0	394	125,0	3,0	69,3
DHO-120	120	124,0		4,15	2,00	4,00	-0,10	127,0		11,0	9,7	3,5	77,00	6,0	396	127,0	3,0	70,0
DHO-122	122	126,0		4,15	2,00	4,00		129,0		11,0	9,8	4,0	78,00	6,0	399	129,0	3,0	71,0
DHO-125	125	129,0		4,15	2,00	4,00		132,0		11,0	10,0	4,0	79,00	6,0	385	132,0	3,0	70,0
DHO-128	127	131,0	+0,63	4,15	2,00	4,00		135,0	+1,50	11,0	10,0	4,0	81,00	6,0	383	135,0	3,0	70,0
DHO-128	128	132,0		4,15	2,00	4,00		135,0	-0,63	11,0	10,2	4,0	81,00	6,0	378	136,0	3,0	69,0
DHO-130	130	134,0		4,15	2,00	4,00		137,0		11,0	10,2	4,0	82,00	6,0	374	138,0	3,0	69,0
DHO-132	132	136,0		4,15	2,00	4,00		139,0		11,0	10,3	4,0	83,00	6,0	366	140,0	3,0	68,0
DHO-135	135	139,0		4,15	2,00	4,00		142,0		11,2	10,5	4,0	84,00	6,0	358	143,0	3,0	67,0
DHO-138	137	141,0		4,15	2,00	4,00		145,0		11,2	10,6	4,0	86,00	6,0	356	145,0	3,0	67,0
DHO-138	138	142,0		4,15	2,00	4,00		145,0		11,2	10,6	4,0	86,00	6,0	352	146,0	3,0	66,5
DHO-140	140	144,0		4,15	2,00	4,00		147,0		11,2	10,7	4,0	87,50	6,0	350	148,0	3,0	66,5

ALL DIMENSIONS IN MILLIMETERS.

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FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.



RING NO.	HOUSING Dia. (mm)	GROOVE SIZE			RINGS SIZE & WEIGHT						SUPPLEMENTARY DATA							
		DIAMETER		WIDTH	DEPTH	THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.
DHO-142	142	146.0		4,15	2,00	4,00		149,0		11,3	10,8	4,0	89,00	6,0	342	150,0	3,0	65,5
DHO-145	145	149,0		4,15	2,00	4,00		152,0		11,4	10,9	4,0	93,00	6,0	336	153,0	3,0	65,0
DHO-148	148	152,0		4,15	2,00	4,00		155,0		11,8	11,1	4,0	100,0	6,0	336	156,0	3,0	65,0
DHO-148	148	152,0		4,15	2,00	4,00		155,0		11,8	11,1	4,0	100,0	6,0	331	157,0	3,0	64,5
DHO-150	150	155,0		4,15	2,50	4,00		158,0		12,0	11,2	4,0	105,0	7,5	326	191,0	3,0	64,0
DHO-152	152	157,0		4,15	2,50	4,00		161,0	+1,50	12,0	11,3	4,0	106,0	7,5	326	202,0	3,5	55,0
DHO-155	155	160,0		4,15	2,50	4,00		164,0	-0,63	12,0	11,4	4,0	107,0	7,5	324	206,0	3,5	55,0
DHO-158	157	162,0	+0,63	4,15	2,50	4,00		167,0		12,3	11,5	4,0	109,0	7,5	328	208,0	3,5	55,5
DHO-158	158	163,0		4,15	2,50	4,00		167,0		12,3	11,5	4,0	109,0	7,5	326	210,0	3,5	55,0
DHO-160	160	165,0		4,15	2,50	4,00		169,0		13,0	11,6	4,0	110,0	7,5	321	212,0	3,5	54,5
DHO-162	162	167,0		4,15	2,50	4,00		171,5		13,0	11,7	4,0	118,0	7,5	321	215,0	3,5	54,5
DHO-165	165	170,0		4,15	2,50	4,00		174,5		13,0	11,8	4,0	125,0	7,5	319	219,0	3,5	54,0
DHO-168	167	172,0		4,15	2,50	4,00		177,5		13,5	12,1	4,0	135,0	7,5	355	221,0	3,5	60,0
DHO-168	168	173,0		4,15	2,50	4,00	-0,10	177,5		13,5	12,1	4,0	135,0	7,5	353	223,0	3,5	60,0
DHO-170	170	175,0		4,15	2,50	4,00		179,5		13,5	12,2	4,0	140,0	7,5	349	225,0	3,5	59,0
DHO-172	172	177,0		4,15	2,50	4,00		181,5		13,5	12,5	4,0	145,0	7,5	357	228,0	3,5	60,0
DHO-175	175	180,0		4,15	2,50	4,00		184,5		13,5	12,7	4,0	150,0	7,5	351	232,0	3,5	59,0
DHO-178	177	182,0		4,15	2,50	4,00		187,5		14,2	12,9	4,0	162,0	7,5	346	235,0	3,5	58,5
DHO-178	178	183,0		4,15	2,50	4,00		187,5		14,2	12,9	4,0	162,0	7,5	344	236,0	3,5	58,0
DHO-180	180	185,0		4,15	2,50	4,00		189,5		14,2	13,2	4,0	165,0	7,5	347	238,0	3,5	58,5
DHO-182	182	187,0		4,15	2,50	4,00		191,5		14,2	13,5	4,0	168,0	7,5	355	241,0	3,5	60,0
DHO-185	185	190,0		4,15	2,50	4,00		194,5		14,2	13,7	4,0	170,0	7,5	349	245,0	3,5	59,0
DHO-188	187	192,0		4,15	2,50	4,00		197,5	+1,70	14,2	13,8	4,0	174,0	7,5	345	248,0	3,5	58,5
DHO-188	188	193,0		4,15	2,50	4,00		197,5	-0,72	14,2	13,8	4,0	174,0	7,5	343	249,0	3,5	58,0
DHO-190	190	195,0	+0,72	4,15	2,50	4,00		199,5		14,2	13,8	4,0	175,0	7,5	340	251,0	3,5	57,5
DHO-192	192	197,0		4,15	2,50	4,00		201,5		14,2	13,8	4,0	178,0	7,5	336	254,0	3,5	57,0
DHO-195	195	200,0		4,15	2,50	4,00		204,5		14,2	13,8	4,0	183,0	7,5	330	258,0	3,5	55,5
DHO-198	197	202,0		4,15	2,50	4,00		207,5		14,2	14,0	4,0	190,0	7,5	330	260,0	3,5	55,5
DHO-198	198	203,0		4,15	2,50	4,00		207,5		14,2	14,0	4,0	190,0	7,5	329	262,0	3,5	55,5
DHO-200	200	205,0		4,15	2,50	4,00		209,5		14,2	14,0	4,0	195,0	7,5	325	265,0	3,5	55,0
DHO-202	202	208,0		5,15	3,00	5,00		214,0		14,2	14,0	4,0	210,0	9,0	625	321,0	4,0	92,5
DHO-205	205	211,0		5,15	3,00	5,00	-0,12	217,0		14,2	14,0	4,0	225,0	9,0	616	326,0	4,0	91,5
DHO-205	207	213,0		5,15	3,00	5,00		217,0		14,2	14,0	4,0	225,0	9,0	610	329,0	4,0	90,0

ALL DIMENSIONS IN MILLIMETERS.

*The radius "R" on the load side must not exceed 0.1 T.

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS. MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005

LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.

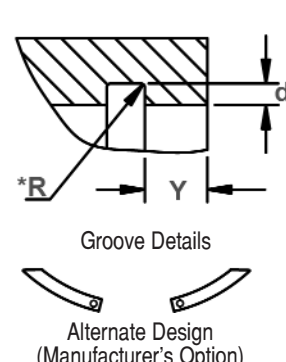
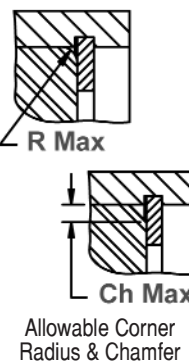
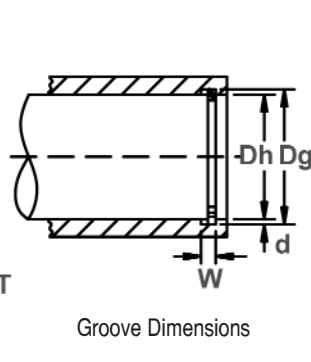
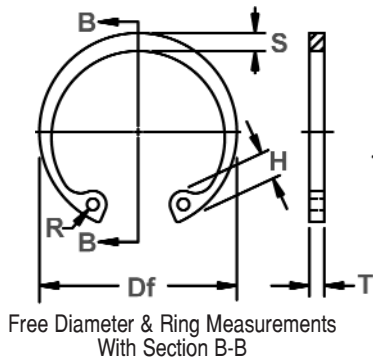


DHO Housing Rings

(DIN 472)

Axially Assembled, Internal, Metric

Once installed in the groove of a housing/bore, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



RING NO.	HOUSING Dia. (mm)	GROOVE SIZE					RINGS SIZE & WEIGHT							SUPPLEMENTARY DATA				
		DIAMETER		WIDTH	DEPTH	THICKNESS ***	FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.	
		Dh	Dg Tol.	W Min.	d	T Tol.	Df Tol.	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN	
DHO-210	208	214,0		5,15	3,00	5,00		222,0		14,2	14,0	4,0	270,0	9,0	607	331,0	4,0	90,0
DHO-210	210	216,0		5,15	3,00	5,00		222,0		14,2	14,0	4,0	270,0	9,0	601	333,0	4,0	89,5
DHO-210	212	218,0		5,15	3,00	5,00		222,0		14,2	14,0	4,0	270,0	9,0	596	337,0	4,0	88,5
DHO-215	215	221,0		5,15	3,00	5,00		227,0		14,2	14,0	4,0	300,0	9,0	586	341,0	4,0	87,0
DHO-215	217	223,0		5,15	3,00	5,00		227,0		14,2	14,0	4,0	300,0	9,0	581	345,0	4,0	86,0
DHO-220	218	224,0		5,15	3,00	5,00		232,0	+1,70	14,2	14,0	4,0	315,0	9,0	580	346,0	4,0	86,0
DHO-220	220	226,0		5,15	3,00	5,00		232,0	-0,72	14,2	14,0	4,0	315,0	9,0	574	349,0	4,0	85,0
DHO-220	222	228,0		5,15	3,00	5,00		232,0		14,2	14,0	4,0	315,0	9,0	568	353,0	4,0	84,0
DHO-225	225	231,0	+0,72	5,15	3,00	5,00		237,0		14,2	14,0	4,0	323,0	9,0	560	357,0	4,0	83,0
DHO-225	227	233,0		5,15	3,00	5,00		237,0		14,2	14,0	4,0	323,0	9,0	555	361,0	4,0	82,0
DHO-230	228	234,0		5,15	3,00	5,00		242,0		14,2	14,0	4,0	330,0	9,0	554	362,0	4,0	82,0
DHO-230	230	236,0		5,15	3,00	5,00		242,0		14,2	14,0	4,0	330,0	9,0	549	365,0	4,0	81,0
DHO-230	232	238,0		5,15	3,00	5,00	-0,12	242,0		14,2	14,0	4,0	330,0	9,0	544	369,0	4,0	80,50
DHO-235	235	241,0		5,15	3,00	5,00		247,0		14,2	14,0	4,0	338,0	9,0	536	373,0	4,0	79,50
DHO-235	237	243,0		5,15	3,00	5,00		247,0		14,2	14,0	4,0	338,0	9,0	531	376,0	4,0	79,00
DHO-240	238	244,0		5,15	3,00	5,00		252,0		14,2	14,0	4,0	345,0	9,0	530	378,0	4,0	79,00
DHO-240	240	246,0		5,15	3,00	5,00		252,0		14,2	14,0	4,0	345,0	9,0	525	380,0	4,0	77,50
DHO-240	242	248,0		5,15	3,00	5,00		252,0	+2,00	14,2	14,0	4,0	345,0	9,0	521	385,0	4,0	77,00
DHO-245	245	251,0		5,15	3,00	5,00		257,0	-0,81	14,2	14,0	4,0	353,0	9,0	514	389,0	4,0	76,50
DHO-245	247	253,0		5,15	3,00	5,00		257,0		14,2	14,0	4,0	353,0	9,0	509	392,0	4,0	76,00
DHO-250	248	254,0	+0,81	5,15	3,00	5,00		262,0		14,2	14,0	4,0	360,0	9,0	507	394,0	4,0	75,50
DHO-250	250	256,0		5,15	3,00	5,00		262,0		14,2	14,0	4,0	360,0	9,0	504	396,0	4,0	75,00
DHO-252	252	260,0		5,15	4,00	5,00		262,0		14,2	16,0	5,0	360,0	12,0	557	535,0	4,0	83,00
DHO-255	255	263,0		5,15	4,00	5,00		270,0		16,2	16,0	5,0	368,0	12,0	549	541,0	4,0	81,50
DHO-255	257	265,0		5,15	4,00	5,00		270,0		16,2	16,0	5,0	368,0	12,0	545	546,0	4,0	81,00

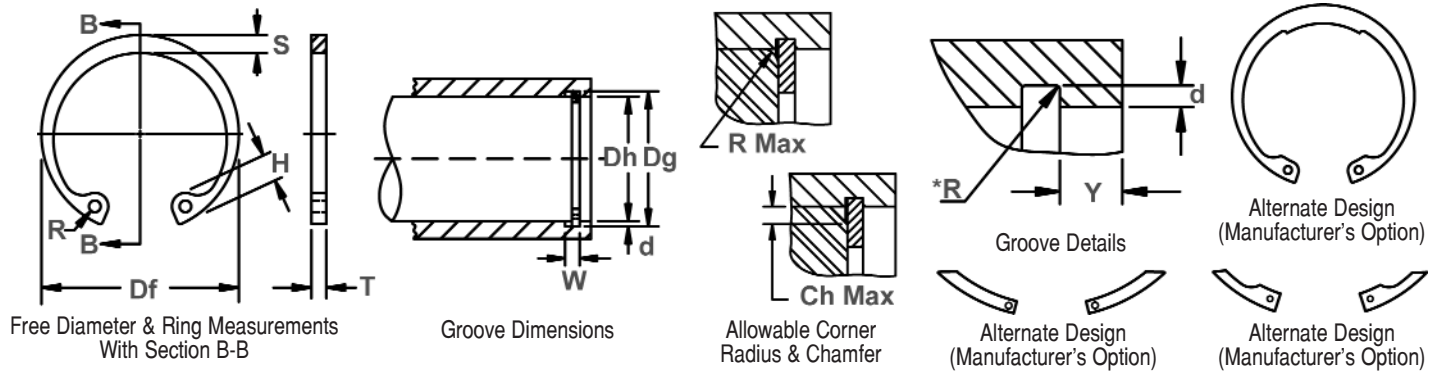
ALL DIMENSIONS IN MILLIMETERS.

*The radius "R" on the load side must not exceed 0.1 T.

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS.

MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.



RING NO.	HOUSING Dia. (mm)	GROOVE SIZE					RINGS SIZE & WEIGHT							SUPPLEMENTARY DATA					
		DIAMETER		WIDTH	DEPTH		THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN
DHO-260	258	266.0		5,15	4,00	5,00		275,0		16,2	16,0	5,0	375,0	12,0	543	548,0	4,0	80,50	
DHO-260	260	268,0		5,15	4,00	5,00		275,0		16,2	16,0	5,0	375,0	12,0	538	553,0	4,0	80,00	
DHO-260	262	270,0		5,15	4,00	5,00		275,0		16,2	16,0	5,0	375,0	12,0	535	556,0	4,0	79,00	
DHO-265	265	273,0		5,15	4,00	5,00		280,0		16,2	16,0	5,0	383,0	12,0	528	563,0	4,0	78,50	
DHO-265	267	275,0		5,15	4,00	5,00		280,0		16,2	16,0	5,0	383,0	12,0	524	566,0	4,0	78,00	
DHO-270	268	276,0		5,15	4,00	5,00		285,0		16,2	16,0	5,0	388,0	12,0	522	570,0	4,0	77,50	
DHO-270	270	278,0		5,15	4,00	5,00		285,0		16,2	16,0	5,0	388,0	12,0	518	573,0	4,0	77,00	
DHO-270	272	280,0		5,15	4,00	5,00		285,0		16,2	16,0	5,0	388,0	12,0	515	577,0	4,0	76,50	
DHO-275	275	283,0		5,15	4,00	5,00		290,0	+2,00	16,2	16,0	5,0	393,0	12,0	509	585,0	4,0	75,50	
DHO-275	277	285,0	+0,81	5,15	4,00	5,00	-0,12	290,0	-0,81	16,2	16,0	5,0	393,0	12,0	505	587,0	4,0	75,00	
DHO-280	278	286,0		5,15	4,00	5,00		295,0		16,2	16,0	5,0	400,0	12,0	504	590,0	4,0	75,00	
DHO-280	280	288,0		5,15	4,00	5,00		295,0		16,2	16,0	5,0	400,0	12,0	499	593,0	4,0	74,00	
DHO-280	282	290,0		5,15	4,00	5,00		295,0		16,2	16,0	5,0	400,0	12,0	497	599,0	4,0	74,00	
DHO-285	285	293,0		5,15	4,00	5,00		300,0		16,2	16,0	5,0	408,0	12,0	491	605,0	4,0	73,00	
DHO-285	287	295,0		5,15	4,00	5,00		300,0		16,2	16,0	5,0	408,0	12,0	487	610,0	4,0	72,00	
DHO-290	288	296,0		5,15	4,00	5,00		305,0		16,2	16,0	5,0	415,0	12,0	485	611,0	4,0	72,00	
DHO-290	290	298,0		5,15	4,00	5,00		305,0		16,2	16,0	5,0	415,0	12,0	482	615,0	4,0	71,50	
DHO-290	292	300,0		5,15	4,00	5,00		305,0		16,2	16,0	5,0	415,0	12,0	479	620,0	4,0	71,00	
DHO-295	295	303,0		5,15	4,00	5,00		310,0		16,2	16,0	5,0	426,0	12,0	474	625,0	4,0	70,50	
DHO-295	297	305,0		5,15	4,00	5,00		310,0		16,2	16,0	5,0	426,0	12,0	471	630,0	4,0	70,50	
DHO-300	298	306,0		5,15	4,00	5,00		315,0		16,2	16,0	5,0	435,0	12,0	469	631,0	4,0	69,50	
DHO-300	300	308,0		5,15	4,00	5,00		315,0		16,2	16,0	5,0	435,0	12,0	466	636,0	4,0	69,00	
DHO-305	305	315,0		6,20	5,00	6,00	-0,15	322,0	+2,00	16,2	20,0	6,0	755,0	15,0	961	810,0	5,0	114,00	
DHO-310	310	320,0	+0,89	6,20	5,00	6,00		327,0	-0,90	20,2	20,0	6,0	770,0	15,0	947	823,0	5,0	113,00	

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*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS.

MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

FOR HARDNESS SPECIFICATIONS, SEE END OF THIS SECTION.

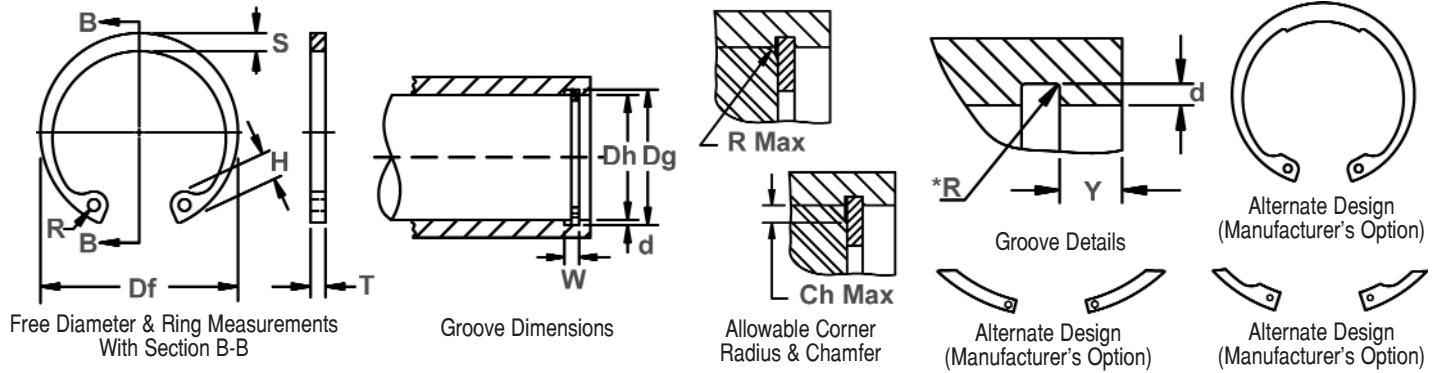


DHO Housing Rings

(DIN 472)

Axially Assembled, Internal, Metric

Once installed in the groove of a housing/bore, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



RING NO.	HOUSING Dia. (mm)		GROOVE SIZE			RINGS SIZE & WEIGHT					SUPPLEMENTARY DATA								
			DIAMETER		DEPTH	THICKNESS ***	FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.		
			Dg	Tol.	W Min.		d	T										Tol.	Df
DHO-315	315	325.0	+0.89	6.20	5.00	6.00	-0.15	332.0	+2.00	-0.90	20.2	20.0	6.0	785.0	15.0	934	837.0	5.0	111.00
DHO-320	320	330.0		6.20	5.00	6.00		337.0			20.2	20.0	6.0	800.0	15.0	919	850.0	5.0	109.00
DHO-325	325	335.0		6.20	5.00	6.00		342.0			20.2	20.0	6.0	810.0	15.0	906	864.0	5.0	108.00
DHO-330	330	340.0		6.20	5.00	6.00		347.0			20.2	20.0	6.0	820.0	15.0	894	876.0	5.0	106.00
DHO-335	335	345.0		6.20	5.00	6.00		352.0			20.2	20.0	6.0	830.0	15.0	880	890.0	5.0	105.00
DHO-340	340	350.0		6.20	5.00	6.00		357.0			20.2	20.0	6.0	840.0	15.0	869	903.0	5.0	104.00
DHO-345	345	355.0		6.20	5.00	6.00		362.0			20.2	20.0	6.0	855.0	15.0	857	916.0	5.0	102.00
DHO-350	350	360.0		6.20	5.00	6.00		367.0			20.2	20.0	6.0	870.0	15.0	846	929.0	5.0	101.00
DHO-355	355	365.0		6.20	5.00	6.00		372.0			20.2	20.0	6.0	880.0	15.0	834	942.0	5.0	99.00
DHO-360	360	370.0		6.20	5.00	6.00		377.0			20.2	20.0	6.0	890.0	15.0	823	955.0	5.0	98.00
DHO-365	365	375.0		6.20	5.00	6.00		382.0			20.2	20.0	6.0	906.0	15.0	813	968.0	5.0	97.00
DHO-370	370	380.0		6.20	5.00	6.00		387.0			20.2	20.0	6.0	920.0	15.0	803	981.0	5.0	95.00
DHO-375	375	385.0		6.20	5.00	6.00		392.0			20.2	20.0	6.0	932.0	15.0	793	994.0	5.0	94.00
DHO-380	380	390.0		6.20	5.00	6.00		397.0			20.2	20.0	6.0	940.0	15.0	784	1008.0	5.0	93.00
DHO-385	385	395.0		6.20	5.00	6.00		402.0			20.2	20.0	6.0	950.0	15.0	774	1021.0	5.0	92.00
DHO-390	390	400.0		6.20	5.00	6.00		407.0			20.2	20.0	6.0	960.0	15.0	764	1033.0	5.0	91.00
DHO-395	395	405.0	6.20	5.00	6.00	412.0	20.2	20.0	6.0	972.0	15.0	756	1047.0	5.0	90.00				
DHO-400	400	410.0	+1.00	6.20	5.00	6.00	417.0	+2.00	-1.00	20.2	20.0	6.0	980.0	15.0	746	1060.0	5.0	89.00	
DHO-410	410	422.0		7.20	6.00	7.00	430.0			26.2	26.0	6.0	1380.0	18.0	1512	1307.0	6.0	150.00	
DHO-420	420	432.0		7.20	6.00	7.00	440.0			26.2	26.0	6.0	1410.0	18.0	1480	1338.0	6.0	147.00	
DHO-430	430	442.0		7.20	6.00	7.00	450.0			26.2	26.0	6.0	1440.0	18.0	1446	1369.0	6.0	144.00	
DHO-440	440	452.0		7.20	6.00	7.00	460.0			26.2	26.0	6.0	1470.0	18.0	1418	1401.0	6.0	141.00	
DHO-450	450	462.0		7.20	6.00	7.00	470.0			26.2	26.0	6.0	1510.0	18.0	1388	1431.0	6.0	138.00	
DHO-460	460	472.0		7.20	6.00	7.00	480.0			26.2	26.0	6.0	1550.0	18.0	1360	1464.0	6.0	135.00	

ALL DIMENSIONS IN MILLIMETERS.

*The radius "R" on the load side must not exceed 0.1 T.

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS.

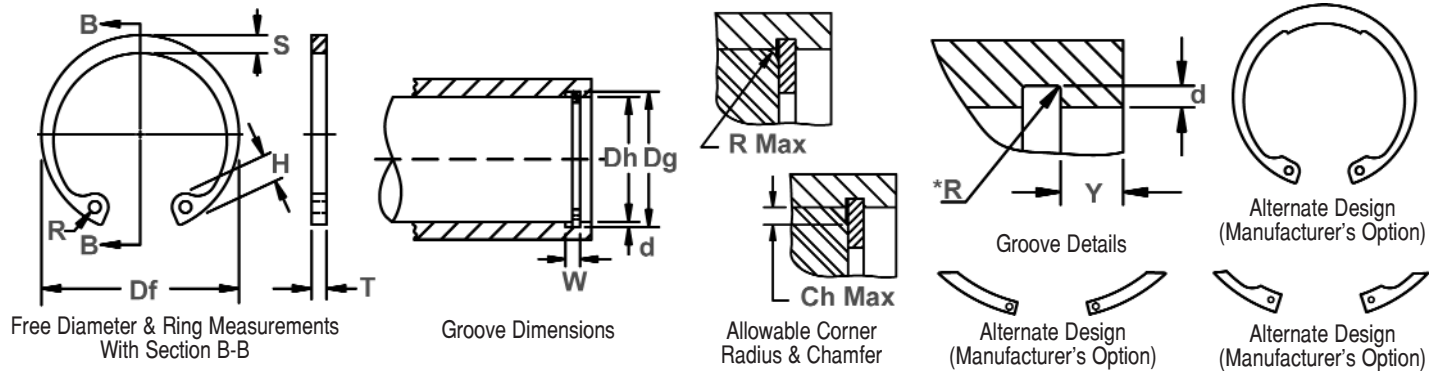
MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

HARDNESS RANGES: CARBON STEEL RINGS (SAE 1060-1090)

RING TYPE	SIZE RANGE	HARDNESS		
		VICKERS	ROCKWELL	
			HRC	LOWER SCALE*
DHO	8-22	470-580	47-54	66-72 HR30N
	23-48	470-580	47-54	-
	50-200	435-530	44-51	-
	202-300	390-470	40-47	-
	305-1000	370-415	38-43	-

*WHERE APPLICABLE





RING NO.	HOUSING Dia. (mm)	GROOVE SIZE						RINGS SIZE & WEIGHT						SUPPLEMENTARY DATA					
		DIAMETER		WIDTH	DEPTH		THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad./Cham.	Max. load w/ R/Ch Max.
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN
DHO-470	470	482,0		7,20	6,00	7,00		490,0	+2,00	26,2	26,0	6,0	1595,0	18,0	1330	1495	6,0	132,0	
DHO-480	480	492,0		7,20	6,00	7,00		500,0	-1,00	26,2	26,0	6,0	1640,0	18,0	1306	1526	6,0	130,0	
DHO-490	490	502,0		7,20	6,00	7,00		510,0		26,2	26,0	6,0	1685,0	18,0	1280	1558	6,0	127,0	
DHO-500	500	512,0		7,20	6,00	7,00		520,0		26,2	26,0	6,0	1730,0	18,0	1256	1588	6,0	125,0	
DHO-510	510	524,0		8,20	7,00	8,00		535,0		26,2	26,0	6,0	2250,0	21,0	1834	1894	7,0	156,0	
DHO-520	520	534,0		8,20	7,00	8,00		545,0		26,2	26,0	6,0	2290,0	21,0	1802	1931	7,0	153,0	
DHO-530	530	544,0		8,20	7,00	8,00	-0,15	555,0		26,2	26,0	6,0	2335,0	21,0	1768	1968	7,0	150,0	
DHO-540	540	554,0		8,20	7,00	8,00		565,0	+3,00	26,2	26,0	6,0	2380,0	21,0	1738	2004	7,0	148,0	
DHO-550	550	564,0		8,20	7,00	8,00		575,0	-1,50	26,2	26,0	6,0	2430,0	21,0	1711	2041	7,0	145,0	
DHO-560	560	574,0	+1,00	8,20	7,00	8,00		585,0		26,2	26,0	6,0	2495,0	21,0	1682	2078	7,0	143,0	
DHO-570	570	584,0		8,20	7,00	8,00		595,0		26,2	26,0	6,0	2560,0	21,0	1650	2114	7,0	141,0	
DHO-580	580	594,0		8,20	7,00	8,00		605,0		26,2	26,0	6,0	2625,0	21,0	1627	2151	7,0	138,0	
DHO-590	590	604,0		8,20	7,00	8,00		615,0		26,2	26,0	6,0	2700,0	21,0	1601	2188	7,0	136,0	
DHO-600	600	614,0		8,20	7,00	8,00		625,0		26,2	26,0	6,0	2770,0	21,0	1571	2221	7,0	134,0	
DHO-650	650	666,0		9,30	8,00	9,00		680,0		34,0	34,0	6,0	3600,0	24,0	2654	2753	7,0	226,0	
DHO-700**	700	716,0		9,30	8,00	9,00		730,0		34,0	34,0	6,0	4120,0	24,0	2471	2966	7,0	210,0	
DHO-750**	750	768,0		9,30	9,00	9,00		785,0		34,0	34,0	9,0	4540,0	27,0	2310	3566	7,0	196,0	
DHO-800**	800	818,0		9,30	9,00	9,00	-0,20	835,0	+4,00	34,0	34,0	9,0	5450,0	27,0	2176	3800	7,0	184,0	
DHO-850**	850	870,0		9,30	10,00	9,00		890,0	-2,00	34,0	34,0	9,0	5990,0	30,0	2045	4500	7,0	173,0	
DHO-900**	900	920,0		9,30	10,00	9,00		940,0		34,0	34,0	9,0	6740,0	30,0	1938	4766	7,0	164,0	
DHO-950**	950	972,0		9,30	11,00	9,00		1000,0		34,0	34,0	9,0	7930,0	33,0	1840	5608	7,0	156,0	
DHO-1000**	1000	1022,0		9,30	11,00	9,00		1050,0		34,0	34,0	9,0	8880,0	33,0	1752	5825	7,0	148,0	

ALL DIMENSIONS IN MILLIMETERS.

*The radius "R" on the load side must not exceed 0.1 T.

** THESE PARTS ARE MADE WITH A CONSTANT SECTION WIDTH (NO TAPER)

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS.

MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.

HARDNESS RANGES: STAINLESS STEEL RINGS (DIN 1.4122 X39CrMo17)

RING TYPE	SIZE RANGE	HARDNESS			
		HV	HRC	15N	30N
DHO	ALL	471-577	47-54	83.9-87.4	65.8-72

HARDNESS RANGES: STAINLESS STEEL RINGS (PH 15-7MO)

RING TYPE	SIZE RANGE	HARDNESS		
		VICKERS	ROCKWELL	
			HRC	LOWER SCALE*
DHO	8-22	435-530	44-51	63-69.5 HR30N
	23-1000	435-530	44-51	-

*WHERE APPLICABLE

